

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION**

SCHEDULE -5d, Surface Water Supply

Date Prepared	Project Identity
Date Revised	

1. For water supply impoundments: N/A ☐

a. Was the impoundment size based on the extreme drought of record or 100 year low flow characteristics of the basin taken over a several year basis? Yes ☐ No ☐
If no, explain _____

b. Available storage volume for use: _____ million gallons

c. Additional storage for increased water use: _____ million gallons

d. Storage volume to maintain minimum pool elevation: _____ million gallons

e. Volume allowance for siltation, evaporation, seepage, etc.: _____ million gallons

f. For new impoundments, describe the soil characteristics including depth to bedrock, type of soil overburden, method of soils investigation, etc.: N/A ☐

2. Intake Structure:

a. From how many levels can water be withdrawn? _____

b. 100 year flood elevation: _____ feet

c. Normal high water elevation: _____ feet

d. Normal low water elevation: _____ feet

e. Record low water elevation: _____ feet

f. Highest intake withdrawal elevation: _____ feet

g. Lowest intake withdrawal elevation: _____ feet

h. Elevation of electrical motors and controls: _____ feet

i. Water approach velocity to the intake structure: _____ ft/sec

j. Method of protecting the inlet structure from dredging, anchors, ice, etc.: _____
spec. page no. _____

k. Has a shore well been provided? Yes ☐ No ☐ If no, what type of diversion device has been provided to keep large quantities of fish or other debris from entering the intake structure?

3. Shore wells: N/A ☐

a. Method of access to the shore well: _____

b. Method of shore well floatation protection: _____
spec. page no. _____

c. Type of shore well screen: Traveling ☐ Removable ☐

d. Have provisions been made to add chemicals into the raw water at the intake structure? Yes ☐ No ☐
If yes, list chemicals: _____

e. Have intake valves and provisions for backflushing or cleaning of the shore well by mechanical device been provided?
Yes ☐ No ☐

4. For impoundment or reservoir construction have all wells subject to inundation been specified to be abandoned in accordance with the Iowa Geological Survey circular "Optimal Well Plugging Procedures" or AWWA Standards? Yes ☐ No ☐